

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 10/041,669

a changing means for changing a sucking force of the suction means in accordance with a property of the recording medium,

wherein the suction unit includes a plate member constituting a suction portion on a transportation surface of the recording medium and having a plurality of suction ports, a shutter provided under the plate member having a plurality of holes corresponding to the suction ports, and a fan for generating a sucking force on the suction ports, and

wherein the shutter opens and closes the suction ports by relatively moving with respect to the plate member.

27. (New) A recording apparatus according to Claim 1, wherein the sucking area increases as the sucking area is spread.

REMARKS

Claims 1 and 6 have been rejected under 35 U.S.C. § 102(b), and the Examiner has indicated that claims 2-5 and 7-15 contain allowable subject matter.

I. Request for Corrected Form PTO-326

In the body of the Office Action, the Examiner approved of the drawing corrections. However, the Examiner failed to indicate that the drawings are accepted on the Form PTO-326. Therefore, Applicant respectfully requests the Examiner to check the appropriate boxes on the Form PTO-326 or other appropriate form indicating that the drawings are approved.

II. Rejection under 35 U.S.C. § 102(b) over JP 03-251473 to Hideyuki (“Hideyuki”)

Claim 6 has been rejected under 35 U.S.C. § 102(b) as being anticipated by Hideyuki. Applicant submits that claim 6 is not anticipated by (and would not have been obvious over) the cited reference.

For example, claim 6 comprises a suction unit for sucking a recording medium that has passed in a recording unit. Also, the suction unit is positioned between a platen opposed to a recording head and discharging roller.

The Examiner contends that the sucking pipe 5c and the sucking pump 5d correspond to the claimed suction unit. However, the pipe 5c and the pump 5d create a sucking force in the platen 5a. Therefore, the “suction unit” 5c and 5d is not positioned between a platen and a discharging roller as recited in claim 6. Accordingly, Applicant submits that claim 6 is patentable over the reference.

III. Rejection under 35 U.S.C. § 102(b) over JP 55-055662 to Naoki et al. (“Naoki”)

Claim 6 has been rejected under 35 U.S.C. § 102(b) as being anticipated by Naoki. Applicant submits that claim 6 is not anticipated by (and would not have been obvious over) the reference.

For example, Naoki does not disclose or suggest the claimed suction unit. Specifically, in Naoki, a number of through-holes are placed on the circumference of a drum, and a recording paper is secured to the circumference by creating negative pressure in the drum with a pump. However, this drum configuration does not suggest a suction unit that is positioned between a

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 10/041,669

platen (opposed to a recording head) and a discharging roller. Therefore, Applicant submits that claim 6 is patentable over the reference.

IV. Rejection under 35 U.S.C. § 102(b) over JP 11-091293 to Isao et al. (“Isao”)

Claim 6 has been rejected under 35 U.S.C. § 102(b) as being unpatentable over Isao. Applicant submits that the claim is patentable over the cited reference.

The Examiner maintains that the fan shown in Isao suggests the claimed suction unit, but Applicant respectfully disagrees. As recited in claim 6, the suction unit is positioned between a platen (opposed to a recording head) and a discharging roller.

On the other hand, in the cited reference, a drive roller 30 and a pressurizing roller 32 pinch both sides of a recording medium, and the paper is moved by rotating the roller 30. As the paper moves over a plotting surface 24a, a suction force is applied to the surface 24a via a fan (presumably item 34), and the paper is sucked to the surface 24a.

However, in Isao, the “suction unit” (i.e. fan 34) is not located between a platen and a discharging roller. Accordingly, Applicant submits that claim 6 is patentable over the cited reference.

V. Rejection under 35 U.S.C. § 102(b) over U.S.P. 4,998,715 to Milan et al. (“Milan”)

Claim 1 has been rejected under 35 U.S.C. § 102(b) as being anticipated by Milan. Applicant submits that claim 1 is not anticipated by (and would not have been obvious over) the

cited reference. For example, claim 1 states that, when the recording medium is transported on the suction unit, the suction ports are sequentially opened so as to spread a sucking area on the suction unit in accordance with the transportation of the leading edge of the recording medium.

The Examiner contends that the openings 32 shown in Figs. 1-3 of Milan correspond to the claimed suction ports as set forth in claim 1. But Applicant respectfully disagrees.

Milan teaches a vacuum that extends lengthwise along a conveyor board 10 to hold a copy sheet 12 on the conveyor board 10. (Col. 3, lines 45 to 58). This vacuum includes a chamber 24 (in the form of a manifold 30) and has the openings 32, which communicate with the interior of the vacuum chamber 24. (Col. 3, lines 60 to 68). The vacuum chamber 24 has a plurality of disks 34 aligned with the openings 32, and the disks 34 are mounted on a shaft 36. Each disc 34 has a recess 38 (Fig. 3) for closing and opening its respective opening 32. (Col. 4, lines 8 to 20).

As the shaft 36 is rotated, all of the discs 34 rotate in unison with the shaft 36. As the discs 34 rotate, the recessed areas 38 are positioned at progressively different angular positions. Therefore, as the discs 34 are rotated with the shaft 36, the vacuum is selectively applied to the various openings 32. (Col. 4, lines 24 to 42). Since the recesses 38 are positioned at progressively differing angular positions, the openings 32 are sequentially opened and closed such that a "vacuum band" having a constant width travels across the conveyor board 10

In the other hand, as recited in claim 1, the suction ports are sequentially opened so as to spread a sucking area on the suction unit. Accordingly, Applicant submits that claim 1 is patentable over Milan.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 10/041,669

VI. Newly Added Claims.

Applicant has added new claims 16-27 to provide more varied protection for the present invention.

VII. Conclusion.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

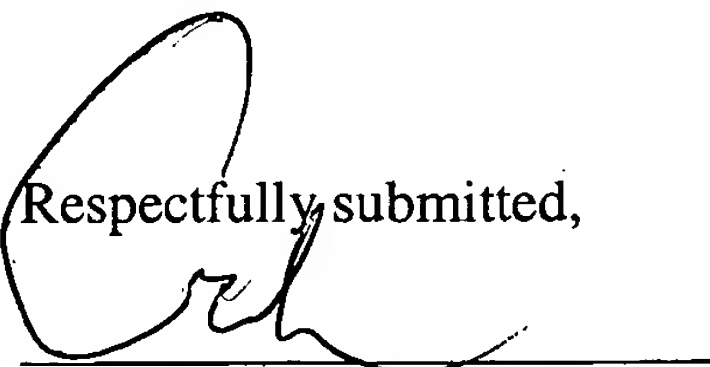
SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE



23373

PATENT TRADEMARK OFFICE

Respectfully submitted,


Grant K. Rowan
Registration No. 41,278

Date: June 18, 2003